

REMARKS

This Amendment is submitted in response to the Office Action mailed on April 28, 2009. Claims 19, 21, 22, 29 and 30 have been amended, and new claims 38-46 have been added. Claims 19-46 remain pending in the present application. In view of the foregoing amendments, as well as the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

While Applicants respectfully traverse Examiner's objections to the drawings, Applicants have submitted a proposed drawing change to Fig. 1. In the Replacement Sheet, Applicants have added an "OPTICAL SYSTEM/SENSOR SYSTEM" in compliance with 37 C.F.R. §1.83(a). While Applicants respectfully submit that this drawing change is not required, Applicants submit the Replacement Sheet depicting amended Fig. 1 to accelerate allowance of the present application.

Applicants have amended the Abstract as requested by Examiner to overcome the objection which should now be withdrawn.

With respect to the objection to claim 32, Examiner's attention is drawn to Applicants' disclosure at Page 8, lines 9-16 and Page 9, line 26 through Page 10, line 1 which describe this claimed feature. More particularly, at Page 8, lines 9-16, the tracking of the laser focusing of the first removing device may be omitted while, as described at Page 9, line 26 through Page 10, line 1, the focusing of the laser beam of

the second laser removing device is tracked. Consequently, the objection to claim 32 is improper and should be withdrawn.

Applicants have amended claims 19, 21, 22, 29 and 30 to overcome Examiner's rejections of these claims under 35 U.S.C. §112, second paragraph. In view of these amendments, Applicants submit that the rejections should be withdrawn.

Claims 19-21, 23, 24, 27-29 and 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hong et al., U.S. Patent Application Publication No. 20030006221 (Hong et al.), in view of Inagawa, U.S. Patent No. 5,126,532 (Inagawa) and Krause, U.S. Patent No. 6,827,988 (Krause). Claims 22, 33 and 34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the modified Hong et al. reference in view of Henderson et al., U.S. Patent No. 5,338,645. Claim 25 stands rejected under 35 U.S.C. §103(a) as being unpatentable over the modified Hong et al. reference. Claim 26 stands rejected under 35 U.S.C. §103(a) as being unpatentable over modified Hong et al. reference in view of Manor, U.S. Patent No. 6,562,698. Claim 30 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Hong et al. in view of Krause. Lastly, claims 25, 31, 32, 36 and 37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the modified Hong et al. reference. Applicants respectfully traverse these rejections for the reasons set forth below and request that the rejections be withdrawn.

With respect to the rejection of claim 19, Examiner will appreciate that claim 19 recites a first laser removing device for laser drilling a work piece using first

operating parameters and a second laser machining apparatus for removing material in layers using second operating parameters that are different from the first operating parameters of the first laser removing device.

In contrast, the primary Hong et al. reference is directed to an apparatus that includes two lasers for cutting different layers of a substrate to form a cut through an entire thickness of the substrate. One of the lasers is focused on a first substrate layer and the other laser is focused on a second layer so as to ablate the layers. As described in Hong et al., the two lasers are provided to cut or singulate a package having individual IC units so as to separate each individual IC unit. So, in Hong et al., the purpose of the two lasers is for cutting a substrate using laser irradiation so as to form a cut through the entire thickness of the substrate. See Paragraphs [0005] and [0029].

Applicants submit that Hong et al. is completely silent with respect to a laser machining apparatus comprising a first laser removing device for laser drilling a workpiece and a second laser removing device which removes material in layers on the same workpiece.

Since Hong et al. is solely directed to cutting a substrate using laser irradiation, one of ordinary skill in the art would have no motivation to substitute one of the lasers of Hong et al. to remove material in layers since this would clearly destroy the intended purpose and function of the Hong et al. apparatus to cut through the entire thickness of a substrate using two lasers.

Indeed, the Krause reference actually teaches away from the present invention since it is directed to laser sintering selected portion of a ceramic material with a laser beam which builds up material rather than removing the material as occurs with the second laser removing device recited in independent claim 19.

In view of the above, Applicants respectfully submit that the rejection of independent claim 19 is improper and should be withdrawn.

Moreover, the rejection of independent claim 30 also fails for the reasons set forth above since claim 30 recites a laser machining method comprising the steps of laser drilling using a first laser removing device and removing layers of material using a second laser removing device to machine the same workpiece. Consequently, the rejection of independent claim 30 is also respectfully submitted to be improper and should be withdrawn.

Moreover, as claims 20-29 and 31-37 depend from allowable independent claims 19 and 30, and further as each of these claims recites a combination of elements or steps not fairly taught or suggested by the prior art of record, Applicants submit that these claims are allowable as well.

New claims 38-46 recite features that were originally recited in claim 29. Applicants submit that these claims are allowable as well.

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CONCLUSION

In view of the foregoing response including the amendments and remarks, this application is submitted to be in complete condition for allowance and early notice to this affect is earnestly solicited. If there is any issue that remains which may be resolved by telephone conference, Examiner is invited to contact the undersigned in order to resolve the same and expedite the allowance of this application.

Please see the electronic fee calculation sheet for the charge in the amount of \$1,110 for the three months extension fee as required by 37 C.F.R. §1.17(a)(3) and the charge in the amount of \$416 for eight extra dependent claims as required by 37 C.F.R. §1.16(i). If any other fees are necessary, the Commissioner is hereby authorized to charge any underpayment or fees associated with this communication or credit any overpayment to Deposit Account No. 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.



David H. Brinkman, Reg. No. 40,532

2700 Carew Tower
441 Vine Street
Cincinnati, OH 45202-2917
(513) 241-2324 – Voice
(513) 421-7269 – Facsimile